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| 10/688,026 | 10/17/2003 | Masato Arai | 16869P-097900US | 2167 |

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| EXAMINER | |
|---|---|
| CERVETTI, DAVID GARCIA | |
| **ART UNIT** | **PAPER NUMBER** |
| 2136 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|---|---|---|
| 3 MONTHS | 03/09/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/688,026 | ARAI ET AL. | |
| | Examiner | Art Unit | |
| | David G. Cervetti | 2136 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *17 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/25/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. Claims 1-10 are pending and have been examined.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**3. Claims 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Shah et al. (US Patent 6,678,835, hereinafter Shah).**

**Regarding claim 5**, Shah teaches

- a policy setting support tool for creating, in a computer system equipped with an access control unit that controls access to computer-managed resources based on policies, said policies, said policy setting support tool comprising **(abstract)**:
- an information database holding, for each object of access, information on the subjects that are most frequently used as a unit of access to it **(col. 6, lines 13-42)**, and
- a unit for creating a policy from the information held in said association information **(col. 7, lines 45-65)**.

**Regarding claim 6**, the combination of Shah and Spinar teaches a subject-specifying unit for specifying unit of access to the object according to its purpose **(Shah, col. 6, lines 12-42)**, and a unit for creating said policy while designating the program specified by said subject-specifying unit as the subject that is permitted to access multiple kinds of object **(Shah, col. 7, lines 45-65)**.

**Regarding claim 7**, the combination of Shah and Spinar teaches wherein said computer system includes a collection of identifications of the subjects equipped with an object-sharing handling unit for sharing objects among multiple subjects and a collection of object-sharing information listing the types of object that can be accessed by each subject, said policy setting support tool further comprising a unit for creating a policy that permits all or some of the types of access from a subject registered in said collection of object-sharing information to objects available to said subject **(Shah, col. 6, lines 12-42, col. 7, lines 45-65, col. 9, lines 1-67)**.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah, and further in view of Spinar et al. (US Patent 7,006,530, hereinafter Spinar).**

**Regarding claim 1**, Shah teaches

- a policy setting support tool for creating, in a computer system equipped with an access control unit that controls access to computer-managed resources based on policies, said policies, said policy setting support tool comprising **(abstract)**:
- an information database arranged by the kind of subject containing sample policies prepared as standard or recommended policies **(col. 7, lines 45-65)**, an access log holding a history of the normal behavior of the subject **(col. 18, lines 23-65)**, and installation information including the path to the subject installed in said computer system **(col. 5, lines 4-50)**;
- an information database arranged by the kind of object containing association information representing the subjects that are most frequently used to access it **(col. 6, lines 13-42)**;

- an access monitoring unit for monitoring the behavior of the subject and recording it in said access log **(col. 18, lines 15-65)**;
- a policy creation unit for creating a draft policy from said sample policy **(col. 7, lines 45-65)**, said association information **(col. 6, lines 13-42)**; and
- a user interface unit for presenting said draft policy to the user, revising said draft policy as directed by the user, and saving the revised policy as the final policy **(col. 13, lines 1-38)**.

Shah does not expressly disclose a differential detection unit for collating said installation information with said sample policy and detecting the differences; and using said differences detected by said differential detection unit to create the policy.

However, Spinar teaches adaptive policies using usage history to determine dynamic changes to a policy **(col. 36, lines 10-60).**

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shah to include adaptive policies that are based on the usage history collected by the history logs provided by Shah. One of ordinary skill in the art would have been motivated to perform such a modification to adapt for a wide variety of user service requirements **(Spinar, col. 2, lines 15-50)**.

**Regarding claim 3**, Shah teaches

- a policy setting support tool for maintaining, in a computer system equipped with an access control unit that controls access to computer-

managed resources based on policies, said policies, said policy setting support tool comprising **(abstract)**:

- an information database or a set of information database containing most up-to-date information regarding the subjects and objects of access **(col. 6, lines 13-42)**;
- a policy creation unit for creating a draft policy **(col. 7, lines 45-65)**; and
- a user interface unit for presenting said draft policy to the user for visual confirmation and revising said draft policy as directed by the user **(col. 13, lines 1-38)**.

Shah does not expressly disclose a differential detection unit for collating the most up-to-date information regarding the subject and object of the access retrieved from said information database or said set of information database with the policies that are already set up, and detecting the items that need to be revised; or creating the policy based on the result of detection produced by said differential detection unit.

However, Spinar teaches adaptive policies using usage history to determine dynamic changes to a policy **(col. 36, lines 10-60).**

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shah to include adaptive policies that are based on the usage history collected by the history logs provided by Shah. One of ordinary skill in the art would have been motivated to perform such a modification to adapt for a wide variety of user service requirements **(Spinar, col. 2, lines 15-50)**.

**Regarding claim 2**, the combination of Shah and Spinar teaches

- a unit for creating a draft policy from one or more of said sample policy, said association information, and said access log, in accordance with the directions given by the user through said user interface unit **(Shah, col. 7, lines 45-65)**, and
- a unit for setting up a policy by accepting requests for revising said draft policy and saving the revised policy **(Shah, col. 7, lines 45-65)**.

**Regarding claim 4**, the combination of Shah and Spinar teaches wherein said differential detection unit performs the collation and detection processing at regular intervals or at the demand of the user **(Spinar, col. 36, lines 10-60)**, and upon detecting any difference, presents it to the user through said user interface unit, and further wherein the user of said policy setting support tool visually checks said difference presented to the user, determines whether the policy should be revised as presented, revises it if and as necessary through said user interface unit, and saves the final policy **(Shah, col. 7, lines 45-65)**.

**6. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah, and further in view of Heintz et al. (US Patent Application Publication 2006/0010492, hereinafter Heintz).**

**Regarding claim 8**, Shah does not expressly disclose notifying violations and modifying the policy accordingly.

However, Heintz teaches a unit for being notified by said access control unit of any access attempts violating said policy, for notifying the user of said computer system administering objects to be accessed about said access attempts, and for carrying out a

process based on a judgment made by said user in response to the notification, wherein: said judgment made by said user is a choice between thereafter permitting all of said access attempts violating said policy, permitting said access attempt only this time, and prohibiting all of said access attempts violating said policy; in case said judgment made by said user is to thereafter permit all of said access attempts violating said policy, said process is to revise said policy so as to make said access attempts legitimate and to notify said access control unit of the legitimacy of said access attempts; in case said judgment made by said user is to permit said access attempt only this time, said process is to notify said access control unit of the legitimacy of said access attempt, without revising said policy; and in case said judgment made by said user is to prohibit all of said access attempts violating said policy, said process is to notify said access control unit of the illegitimacy of said access attempts, without revising said policy **(abstract)**.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shah to include raising alerts when specific events occurred. One of ordinary skill in the art would have been motivated to perform such a modification to provide for a faster response to events and enforce security policies **(Heintz, paragraphs 6-8)**.

**Regarding claim 9**, Shah does not expressly disclose notifying violations and modifying the policy accordingly.

However, Heintz teaches a unit for being notified by said access control unit of any access attempts to an object not registered in the collection of said policies coming

from a subject associated with said object, for notifying the user of said computer system about said access attempts, and for carrying out a process based on a judgment made by said user in response to the notification, wherein: said judgment made by said user is a choice between permitting and prohibiting said access attempt made to said object not registered in the collection of said policies coming from a subject associated with said object; in case said judgment made by said user is to permit said access attempt, said process is to revise said policy so as to make said access attempt legitimate and to notify said access control unit of the legitimacy of said access attempt; and in case said judgment made by said user is to prohibit said access attempt, said process is to notify said access control unit of the illegitimacy of said access attempt, without revising said policy **(abstract)**.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shah to include raising alerts when specific events occurred. One of ordinary skill in the art would have been motivated to perform such a modification to provide for a faster response to events and enforce security policies **(Heintz, paragraphs 6-8)**.

**Regarding claim 10**, Shah does not expressly disclose notifying violations and modifying the policy accordingly.

However, Heintz teaches a unit for being notified by said access control unit of any access attempts coming from a subject which only partially matches the collection of said policies, for notifying the user of said computer system about said access attempts, and for carrying out a process based on a judgment made by said user in

response to the notification, wherein: said judgment made by said user is a choice between permitting and prohibiting said access attempt made by said subject; in case said judgment made by said user is to permit said access attempt, said process is to revise said policy so as to make said access attempt legitimate and to notify said access control unit of the legitimacy of said access attempt; and in case said judgment made by said user is to prohibit said access attempt, said process is to notify said access control unit of the illegitimacy of said access attempt, without revising said policy **(abstract)**.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shah to include raising alerts when specific events occurred. One of ordinary skill in the art would have been motivated to perform such a modification to provide for a faster response to events and enforce security policies **(Heintz, paragraphs 6-8)**.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Venkatesan (NPL Threat-Adaptive Security Policy) teaches keeping history of user accesses and adapting policy according to changes in the usage pattern. Moriconi (US Patent 6,158,010 and 6,941,472) teaches creating/editing/updating policies. Attwood (US Patent 6,347,376) teaches dynamic rules of a security policy. Proctor (US Patent 6,530,024) teaches adaptive security policies that are updated based on behavior analyzed from event log files that trigger policy updates

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DGC

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3/7/07